

REMARKS / ARGUMENTS

This Amendment and Response to Office Action is filed in response to the Final Office Action of May 17, 2005. Presently, claims 1-2, 4-6 and 8-13 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,068,381 issued to Ayres ("Ayres '381 patent" hereafter). Claims 1, 3-5, 7 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication No. 2001/0003504 to Ishihara et al. ("Ishihara et al." hereafter). Claims 15, 16, 18 and 19 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,947,578 issued to Ayres ("Ayres '578 patent" hereafter). Further, claim 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Ayres '578 patent in view of the Ayres '381 patent. These rejections set forth in the outstanding Office Action are overcome for the reasons stated below.

I. Rejection of Claims 1-2, 4-6 and 8-13 as Being Anticipated By The Ayres '381 Patent

Claims 1-2, 4-6 and 8-13 stand rejected under 35 U.S.C. §102(b) as being anticipated by the Ayres '381 patent. The Applicants respectfully traverse this rejection.

Amended claim 1 recites, *inter alia*, that a portion of each of the pads is integrally surrounded by a material comprising the frame body. In accordance with the ordinary meaning of the word "embedded", this additional language has been introduced in the claim to clarify the meaning of originally presented feature "a frame having a frame body in which are *embedded* a plurality of contact pads"; no new issues thus are raised by way of this amendment.

In contrast, the Ayres '381 patent discloses a backlight structure in which the lamp member 52 with its terminals 58 is assembled within the pocket 40. See col. 5, lines 1-13: "*the lamp member 52 is received in the pocket 40 of the frame with the lamp member 52 aligned with*

the inner opening 42..." In the Ayres '381 patent, the terminals 58 of the lamp member 52 extend from the body of the lamp outside the frame body. The Ayres '381 patent thus fails to teach or even suggest the claimed invention in which contact pads are embedded in the frame body, and a portion of each of the contact pads is integrally surrounded with a material comprising the frame body. The Ayres '381 patent neither teaches nor suggests that the contact pads embedded inside the frame body are provided with resilient bent portions configured to connect the one or more light-emitting device by contact engagement, as described in claim 11. For at least the foregoing reasons, it is believed that claims 1 and 11 patently distinguish over the Ayres '381 patent. By virtue of their dependency on claim 1, claims 2, 4-6 and 8-13 should also be allowable. Withdrawal of the rejection to claims 1-2, 4-6 and 8-13 thus is respectfully requested.

II. Rejection of Claims 1, 3-5, 7 and 14 as Being Anticipated By Ishihara et al.

Claims 1, 3-5, 7 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ishihara et al. The Applicants respectfully traverse this rejection.

As discussed above, amended claim 1 recites a frame body in which are embedded a plurality of contact pads, and a portion of each of the contact pads is integrally surrounded with a material comprising the frame body.

In contrast, Ishihara et al. teaches a backlight structure in which contact terminals 40 are deposited on a surface of a substrate 4 and transparent electrodes 24 made of an indium-tin-oxide material are deposited on an opposing surface of a light guide plate 2. LED chip 3 is mounted and electrically connected to the contact terminals 40 and transparent electrode 24. See FIG. 1, paragraph [0039]: "*The LED chip 3 is mounted on the substrate 4 with the second electrode 30b*

held in direct electrical contact with the terminal 40; and paragraph [0041]: "The light guide panel 2 is mounted on the liquid crystal panel 1 and the LED chip 3 with the transparent electrode 24 held in direct contact with the electrode 30a of the LED chip 3".

Therefore, Ishihara et al. like the Ayres '381 patent fails to disclose or even suggest the claimed invention in which a frame body configured to assemble the liquid crystal panel with the backlight is embedded with contact pads, so that a portion of each of the contact pads is integrally surrounded with a material comprising the frame body. For at least the foregoing reasons, the Applicants submit that claim 1 patently distinguishes over the Ayres '381 patent. Claims 3-5, 7 and 14 are dependent on claim 1, and thus should also patently distinguish over Ishihara et al. Withdrawal of the rejection to claims 1, 3-5, 7 and 14 thus is respectfully requested.

III. Rejection of Claims 15-16 and 18-19 as Being Anticipated By The Ayres '578 Patent

Claims 15-16 and 18-19 stand rejected under 35 U.S.C. 102(b) as being anticipated by the Ayres '578 patent. The Applicants respectfully traverse this rejection.

Amended claim 15 recites a frame structure for a backlight assembly that is provided with contact pads embedded in the frame body, a portion of each of the contact pads being integrally surrounded by a material comprising the frame body.

In contrast, the Ayres '578 patent teaches a backlight structure in which the lamp 22 attached to lead frame members 24 is encapsulated within apertures 18 of a light waveguide 12; the light waveguide 12 with encapsulated lamps 22 then can be mounted to a frame 34. See col. 3, lines 42-45: *"The lamp member 22 is encapsulated between the upper and lower surfaces 14, 16 of the light waveguide 12..."*; col. 4, lines 64-66: *"The coil 38 of light modules 20, including*

lead frame members 24 with lamps 22 attached, is uncoiled as successive lamps members are disposed into the apertures 18."; and FIG. 3. The Ayres '578 patent thus fails to disclose or even suggest the claimed frame structure in which contact pads are embedded in frame body configured to assemble a liquid crystal panel with the backlight, so that a portion of each of the contact pads is integrally surrounded with a material comprising the frame body. For at least the foregoing reasons, the Applicants respectfully submit that claim 15 patentably distinguishes from the Ayres '578 patent. By virtue of their dependency on claim 15, dependent claims 16 and 18-19 also patentably distinguish over the Ayres '578 patent. Withdrawal of the rejection to claims 15-16 and 18-19 thus is respectfully requested.

IV. Rejection of Claim 17 as Being Unpatentable Over The Ayres '578 Patent In View Of The Ayres '381 Patent

Claim 17 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the Ayres '578 patent in view of the Ayres '381 patent. The Applicants respectfully traverse this rejection.

As discussed above, neither the Ayres '578 patent nor the Ayres '381 patent disclose or even suggest a backlight structure in which a frame body embeds contact pads, so that a portion of each of the pads is integrally surrounded by a material comprising the frame body. In addition, none of these two references either teaches or hint that the embedded contact pads should include resilient bent portions, as described in claim 17. For at least the foregoing reasons, it is submitted that claim 17 patentably defines over the Ayres '578 patent and the Ayres '381 patent.

V. Addition Of New Claims

New claims 20-24 are added to cover variant embodiments of the invention not disclosed in the prior art references. Allowance of these claims is respectfully requested.

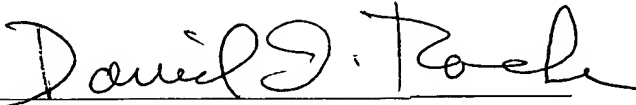
CONCLUSION

For at least the foregoing reasons, it is believed that all of pending claims 1-24 of the present application patently define over all the prior art references and are in proper condition for allowance. If Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, Examiner is invited to call the undersigned. Because this filing is submitted within the three-month deadline, no Petition for Extension of Time is required. In connection to the additional fees required for the additional claims, Commissioner is authorized to deduct from **Deposit Account No. 02-0400 (Baker & McKenzie)**. **When identifying such a withdrawal, please use our Attorney Docket No.: AUO-101.**

If Examiner has any questions regarding this filing or the application in general, Examiner is invited to contact Applicant's attorney at the below-listed address.

Respectfully submitted,

Date: June 29, 2005


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